



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MEMORANDUM

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

Date / Time: August 25, 2016 / 1:00 p.m. – 3:00 p.m.

Subject: Technical Workshop, Malathion Mosquito Adulticide Aerial Application Parameters & Efficacy

From: Steven Snyderman, Chemical Review Manager
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Meeting Overview:

On August 25, 2016, the Environmental Protection Agency's (EPA) Office of Pesticide Programs (OPP) requested a meeting including both The Centers for Disease Control (CDC), the American Mosquito Control Association (AMCA) and parts of USDA in order to discuss application parameters and efficacy options for the use of malathion as a mosquito adulticide. At the workshop, EPA received valuable information on how the aerial mosquitocide applications of malathion are utilized by the mosquito control districts, including application release height, droplet size, and application rate. EPA hopes that this workshop, along with other outreach to mosquito control experts and mosquito control districts around the United States, will help users continue to safely and effectively use malathion as part of their mosquito control plans.

Meeting Minutes:

The meeting was conducted via an online conference call, however many individuals joined in person. The focus of the discussion surrounded how mosquito control districts (MCD) currently utilize malathion products within legal labeled parameters. The greater goal of this meeting being to evaluate how the aerial mosquito use of malathion can be modified to result in lower exposure and eliminate potential safety concerns.

Discussions showed that some MCDs utilize rates as low as 1-1.5 fluid ounces product/Acre (fl. oz/A). Local efficacy data available from certain MCDs concurred with these smaller use rates. This includes some municipalities using release heights for fixed wing aircraft as low as 150 ft with droplet sizes ranging from 35 – 60 micrometers. Although current registered labels allow for malathion to be aerially applied at a maximum rate of 3 fl.oz/A, MCDs rarely apply at this rate.

Although talks centered on current and potential use rates, droplet sizes, and release heights, the group expanded upon several other factors. The following parameters were also included in the conversation as it relates to potential reductions in malathion deposition from aerial use: relative swath width, wind speed, and use of helicopter vs. fixed wing aircraft. In general it was determined that these factors could play a part in general deposition numbers, however changing these pieces showed less significant effects on deposition than rate, droplet size, and release height.

In addition, several regionally specific factors were discussed. These factors included concepts such as distance from the ocean/gulf and its effect on weather conditions, whether the MCD encompassed mostly residential areas, tree coverage, topography, and general public opinion on spraying.

In conclusion, the Agency received very helpful information from the MCDs and plans on utilizing this information moving forward with registration review. In addition, this discussion was useful in helping form EPA's path forward for short term use recommendations as the registration review for malathion continues.